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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,045	05/15/2001	Maria Raidel	29226-1PCT/US/ KC13,065.1	2567

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EXAMINER

ANDERSON, CATHARINE L

ART UNIT PAPER NUMBER

3761

DATE MAILED: 11/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/855,045

Applicant(s)

RAIDEL ET AL.

Examiner

C. Lynne Anderson

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-55 and 57-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-55 and 57-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 36-55, 57-61, and 64 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 36 recites the limitation "the respective web of sheet material" in line 14. There is insufficient antecedent basis for this limitation in the claim. Previously the limitation "at least one web of sheet material" was recited.

Claim 41 recites the limitation "such pigment" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 49 recites the limitation "said passages" in line 16. There is insufficient antecedent basis for this limitation in the claim. Previously the limitation "said discrete passages" was recited.

Claims 57 and 61 recite the limitation "tapering ends thereof" in lines 2 and 13, respectively. It is unclear to what the term "thereof" refers.

Claim 61 recites the limitation "the tapering ends" in line 13. There is insufficient antecedent basis for this limitation in the claim.

Regarding claims 60 and 64, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Art Unit: 3761

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 36-41 and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Karami (4,055,180).

Karami discloses an absorbent article 20, as shown in figure 1, having a front area, a rear area, and a central area. The absorbent article 20 comprises a liquid permeable layer 28, a liquid impermeable layer 24, an undulating layer 56, a liquid distribution layer 70, and a liquid storage layer 32, as shown in figure 3. The liquid distribution layer 70 comprises a web of sheet material having openings 74, as shown in figure 3

With respect to claim 37, the openings 74 are formed mechanically.

With respect to claim 38, the undulating layer 56 facilitates the transfer of fluid into the front area and the rear area of the absorbent article, as disclosed in column 5, lines 2-4.

With respect to claim 39, the undulating layer 56 comprises transport channels extending along a longitudinal direction of the absorbent article, as shown in figure 1.

With respect to claim 40, the undulating layer 56 comprises an undulating strip of material which is connected to the liquid distribution layer 70, as shown in figure 3.

With respect to claim 41, the undulating layer 56 comprises natural fibers, which inherently contain pigment and are capable of preventing visible discernment of the liquid storage layer 32.

With respect to claim 43, the liquid storage layer 32 extends from the central area into the front area and the rear area, as shown in figure 1. Since the applicant has not defined the dimensions of the front, rear, and central areas, the areas may be defined such that the front area and the rear area have a greater volume than the central area, and are therefore able to retain a higher volume of liquid.

Claims 36-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Cohen et al. (5,569,226).

Cohen discloses an absorbent article, as shown in figure 1, having a front area, a rear area, and a central area. The absorbent article comprises a liquid permeable layer 10, a liquid impermeable layer 14, an undulating layer 20, a liquid distribution layer 22, and a liquid storage layer 24, as shown in figure 4. The liquid distribution layer 22 comprises a web of sheet material having openings, as disclosed in column 6, lines 43-67.

With respect to claim 37, the openings are formed mechanically during the mechanical air-laying of the web of sheet material.

With respect to claim 38, the undulating layer 20 facilitates the transfer of fluid into the front area and the rear area of the absorbent article, as disclosed in column 2, lines 59-61.

With respect to claim 39, the undulating layer 20 comprises transport channels extending along a longitudinal direction of the absorbent article, as shown in figure 1.

With respect to claim 40, the undulating layer 20 comprises an undulating strip of material which is connected to the liquid distribution layer 22, as shown in figure 4.

With respect to claim 41, the undulating layer 20 comprises natural fibers, as disclosed in column 6, lines 15-19, which inherently contain pigment and are capable of preventing visible discernment of the liquid storage layer 24.

With respect to claim 42, the web of sheet material comprises an uncreped through-air-dried material, as disclosed in column 6, lines 43-35.

With respect to claim 43, the liquid storage layer 24 extends from the central area into the front area and the rear area, as shown in figure 1. Since the applicant has not defined the dimensions of the front, rear, and central areas, the areas may be defined such that the front area and the rear area have a greater volume than the central area, and are therefore able to retain a higher volume of liquid.

Claims 49, 54-55, 57-59, and 61 are rejected under 35 U.S.C. 102(e) as being anticipated by Trombetta et al. (5,603,707).

Trombetta discloses an absorbent article 20, as shown in figure 1, having a front area, a rear area, and a central area. The absorbent article 20 comprises a liquid permeable layer 21, a liquid impermeable layer 23, a liquid distribution layer 27, and a

Art Unit: 3761

liquid storage layer 24. The liquid distribution layer 27 comprises discrete passages therethrough, as disclosed in column 7, lines 50-53. The liquid distribution layer 27 of Trombetta may comprise the apertured web disclosed by Thompson (3,929,135), as disclosed in column 7, lines 59-67. Thompson discloses an apertured web having passages that taper inwardly toward a liquid storage layer, as shown in figure 4.

With respect to claim 54, the liquid storage layer 24 extends from the central area into the front area and the rear area, as shown in figure 1. Since the applicant has not defined the dimensions of the front, rear, and central areas, the areas may be defined such that the front area and the rear area have a greater volume than the central area, and are therefore able to retain a higher volume of liquid.

With respect to claim 55, the liquid distribution layer 27 and the liquid storage area 24 are in contact with one another via compression, as disclosed in column 7, lines 43-48.

With respect to claim 57, Thompson discloses the passages have feet at the tapering ends, and the feet are in contact with the liquid storage layer, as shown in figure 4.

With respect to claim 58, the passages of the liquid distribution area 27 are disposed in the front area and the rear area of the absorbent article 20.

With respect to claim 59, the absorbent article 20 comprises a sanitary pad, as disclosed in column 2, lines 45-49.

With respect to claim 61, the liquid distribution layer 27 comprises areas having passages, as disclosed in column 7, lines 50-53. The passages are tapered, as

Art Unit: 3761

disclosed in the rejection of claim 49 above. Thompson shows, in figure 4, the feet of the passages being exclusively in contact with only the liquid storage layer. The liquid storage layer and liquid distribution layer are clearly separate layers, and therefore an area of separation exists between the two. The limitation "area of separation" does not explicitly claim a physical gap between the layers, and therefore any area in which the layers are separate is considered the area of separation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karami (4,055,180) as applied to claim 36 above.

Karami discloses all aspects of the claimed invention but remains silent as to the way in which the liquid distribution layer and the liquid storage layer are joined. The use of compression to join two layers is well-known in the art as a secure and economical method of joining layers. It would therefore be obvious to one of ordinary skill in the art at the time of invention to join the liquid distribution layer and the liquid storage layer of Karami by means of compression, in order to have a secure and economical bond.

With respect to claim 45, joining the liquid distribution layer and the liquid storage layer by means of compression would result in point-like areas of compression separated by the openings in the liquid distribution layer.

Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karami (4,055,180) as applied to claim 36 above, and further in view of Chappell et al. (H1511).

Karami discloses all aspects of the claimed invention but remains silent as to the way in which the liquid distribution layer and the liquid storage layer are joined. Chappell discloses joining layers of an absorbent article by means of a latex adhesive, as described in column 13, lines 23-24, which is hydrophilic. Chappell teaches applying the adhesive in a point-like manner, as described in column 13, line 31, to avoid blocking the openings in the layers with the adhesive, as disclosed in column 13, lines 2-4. It would therefore be obvious to one of ordinary skill in the art at the time of invention to join the liquid distribution layer and liquid storage layer of Karami using the method taught by Chappell in order to avoid blocking the openings in the layers with the adhesive.

Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen et al. (5,569,226) as applied to claim 36 above, and further in view of Chappell et al. (H1511).

Cohen discloses all aspects of the claimed invention but remains silent as to the way in which the liquid distribution layer and the liquid storage layer are joined. Chappell discloses joining layers of an absorbent article by means of a latex adhesive, as described in column 13, lines 23-24, which is hydrophilic. Chappell teaches applying the adhesive in a point-like manner, as described in column 13, line 31, to avoid blocking the openings in the layers with the adhesive, as disclosed in column 13, lines

2-4. It would therefore be obvious to one of ordinary skill in the art at the time of invention to join the liquid distribution layer and liquid storage layer of Cohen using the method taught by Chappell in order to avoid blocking the openings in the layers with the adhesive.

Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karami (4,055,180) as applied to claim 36 above, and further in view of Ahr et al. (4,323,069).

Karami discloses all aspects of the claimed invention with the exception of the liquid distribution layer comprising funnel-shaped openings that taper inwardly. Ahr discloses a liquid distribution layer 40 comprising a plurality of funnel-shaped openings that taper inwardly, as shown in figure 5. The funnel-shaped openings of the liquid distribution layer 40 reduce the amount of liquid that may pass back through the layer 40 without reducing the speed with which liquids pass through the layer, as disclosed in column 12, lines 58-62. It would therefore be obvious to one of ordinary skill in the art at the time of invention to taper the openings in the liquid distribution layer of Karami, as taught by Ahr, in order to reduce the amount of liquid able to pass back through the layer.

Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen et al. (5,569,226) as applied to claim 36 above, and further in view of Ahr et al. (4,323,069).

Cohen discloses all aspects of the claimed invention with the exception of the liquid distribution layer comprising funnel-shaped openings that taper inwardly. Ahr discloses a liquid distribution layer 40 comprising a plurality of funnel-shaped openings

that taper inwardly, as shown in figure 5. The funnel-shaped openings of the liquid distribution layer 40 reduce the amount of liquid that may pass back through the layer 40 without reducing the speed with which liquids pass through the layer, as disclosed in column 12, lines 58-62. It would therefore be obvious to one of ordinary skill in the art at the time of invention to taper the openings in the liquid distribution layer of Cohen, as taught by Ahr, in order to reduce the amount of liquid able to pass back through the layer.

Claims 62, 63, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abuto et al. (5,788,684) in view of Ahr et al. (4,323,069).

Abuto discloses all aspects of the claimed invention with the exception of the openings being funnel-shaped. Abuto discloses an absorbent article 50, as shown in figure 7, having a front area, a rear area, and a central area. The absorbent article 50 comprises a liquid permeable layer 52, a liquid impermeable layer 54, a liquid distribution layer 16, and a liquid storage layer 14. The liquid distribution layer 16 comprises a first take-away layer 15 and a second take-away layer 17, each layer having openings 18 defining discrete passages therethrough. The openings 18 of the first take-away layer 15 and second take-away layer 17 are spaced laterally from each other, as shown in figure 4, thus preventing a direct path for liquid. The openings 18 are shown in figure 1 as having a cylindrical shape.

Ahr discloses a liquid distribution layer 40 comprising a plurality of funnel-shaped openings that taper inwardly, as shown in figure 5. The funnel-shaped openings of the liquid distribution layer 40 reduce the amount of liquid that may pass back through the

layer 40 without reducing the speed with which liquids pass through the layer, as disclosed in column 12, lines 58-62.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to taper the openings in the liquid distribution layer of Abuto, as taught by Ahr, in order to further reduce the amount of liquid able to pass back through the layer.

With respect to claim 63, Abuto further discloses an uppermost layer 12 that is void of any funnel-shaped openings, as shown in figure 1.

With respect to claim 65, Ahr discloses funnel-shaped openings that are wider at a first respective portion 44 than at a second respective portion 46, the second respective portion 46 being located further from the liquid permeable layer 12 of the absorbent article 10, as shown in figures 2 and 5.

Allowable Subject Matter

Claims 50-53, 60, and 64 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (703) 306-5716. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (703) 308-1957. The fax phone numbers for

Art Unit: 3761

the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

CNA

cla

November 13, 2002



DENNIS RUHL
PRIMARY EXAMINER